## Reisch, Timothy A CIV NAVFAC MID ATLANTIC

**From:** Miller,Debra [damiller@deq.virginia.gov]

**Sent:** Tuesday, May 30, 2006 2:08 PM

**To:** Reisch, Timothy A CIV NAVFAC MID ATLANTIC; Paul.Landin@ch2m.com; Clifford, Peter J CIV 106.3, C106.3; Franklin.Greyson@epamail.epa.gov; daniel.holloway@ch2m.com; Host, Mike M CIV 106.3, C106.3

**Cc:** jamie.butler@ch2m.com

**Subject:** RE: Site 10 Corrections and PP for Review

Thumbs up from me too!

As for the week of the 13th - I know I will be gone one day, but that has not been set yet (last week of school for Tess - and I have to go in for career day to talk to her class, it will be a short speech - forget engineering, go into business!).

*Debra A. Miller*
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*Federal Facilities Restoration Program*
*Virginia Department of Environmental Quality*
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*"Mommy, I tried to be good, it is just too hard!" - Sarah Miller, Age 4*

> -----Original Message-----
> **From:** Reisch, Timothy A CIV NAVFAC MID ATLANTIC [mailto:timothy.reisch@navy.mil]
> **Sent:** Tuesday, May 30, 2006 8:31 AM
> **To:** Paul.Landin@ch2m.com; Clifford, Peter J CIV 106.3, C106.3; Miller,Debra; Franklin.Greyson@epamail.epa.gov; daniel.holloway@ch2m.com; Host, Mike M CIV 106.3, C106.3
> **Cc:** jamie.butler@ch2m.com
> **Subject:** RE: Site 10 Corrections and PP for Review
>
> Thumbs up on the revisions to the RI/FFS/HHRA - can we make this Final with a May 2006 cover?
>
> The Proposed Plan looks good. However, to make the ROD this FY, we should try to get this for legal review soon and initiate the public comment period in July. I think we should be able to resolve comments via an interactive conference call - can we try a sometime the week of 13 -16 June?
>
> Thanks - Tim
>
> **From:** Paul.Landin@ch2m.com [mailto:Paul.Landin@ch2m.com]
> **Sent:** Thursday, May 25, 2006 4:42 PM
> **To:** Reisch, Timothy A CIV NAVFAC MID ATLANTIC; Clifford, Peter J CIV 106.3, C106.3; damiller@deq.virginia.gov; Franklin.Greyson@epamail.epa.gov; daniel.holloway@ch2m.com; Host, Mike

M CIV 106.3, C106.3
**Cc:** jamie.butler@ch2m.com
**Subject:** FW: Site 10 Corrections and PP for Review

PMT:

Attached is the updated version of the PP for Site 10 following discussion and edits made at the May PMT meeting. The areas where text was changed has been highlighted green to help find it. Of particular note was the re-work of the HHRA summary to aid in ease of reading.

Additionally, the proposed changes (by section) to the RI/HHRA/FFS are below that have been added to clarify the MCL exccedance yet no risk for antimony and cadmium, and provide closure per Debbie's comment on the human nutrient analysis. Pending agreement on the revised language below, we have consensus to finalize this document following the May PMT meeting. Please review and confirm your agreement so we may move forward with the Final RI/HHRA/FFS.

Let us know if you have any questions.

Paul

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**From:** Butler, Jamie/VBO
**Sent:** Thursday, May 25, 2006 4:06 PM
**To:** Landin, Paul/VBO
**Subject:** FW: Site 10 Corrections and PP for Review

Hi Paul,
The Redline and Accepted redline changes to the Site 10 Proposed Plan are attached. Below are the suggested changes to the RI and the Human Health Risk Assessment Technical Memorandum.
Thanks
Jamie

## RI Executive Summary, Risk Management, 2nd paragraph

"There are no potential human health risks due to exposure to soil and groundwater within the boundaries of Site 10 under current land use scenarios. Based on risk calculations, future residential use of the site may result in potential unacceptable risks due to ingestion of arsenic, iron, and manganese and dermal contact with manganese from site groundwater. Additionally, the future industrial use of the site may pose a slight risk due to ingestion of iron in site groundwater. Although antimony and cadmium were detected above the MCL, these exceedances occurred in isolated locations and individually pose no unacceptable risks to the construction worker, industrial worker, or potential future resident. The PMT determined that these potential risks are acceptable because no source area or discernable plume of groundwater contamination was identified, and there was no statistical difference in groundwater concentrations up- and down-gradient of Site 10. Therefore, no further CERCLA action for groundwater at Site 10 is warranted."

## RI Section 7.7, 3rd paragraph

"Although arsenic, antimony, and cadmium were detected above the MCL, antimony and cadmium MCL exceedances occurred in isolated locations and the results of the HHRA indicated that the individual concentrations present in groundwater do not pose unacceptable

risks to the construction worker, industrial worker, or potential future resident (Individual HI/target organ effects are equal to or less than 1). The MCL exceedances for antimony (2 sampling locations) and cadmium (1 sampling location) are not co-located with soil samples that have concentrations of these metals above screening levels; therefore, it appears that the primary contaminant mechanism identified at this site, leaching from soil/fill to groundwater, is not occurring for these metals. Arsenic was detected above the MCL in groundwater throughout the site, but there are no statistical differences in concentrations upgradient, downgradient, and around the locations of elevated soil arsenic concentrations. Therefore, it is recommended that no further action for residential use of groundwater at Site 10 is recommended".

**RI Section 8.2.2, 6th paragraph**

"Although antimony, and cadmium were detected above the MCL, these exceedances occurred in isolated locations, and the results of the HHRA indicated that the individual concentrations present in groundwater do not pose unacceptable risks to the construction worker, industrial worker, or potential future resident. The data indicates that the antimony and cadmium in groundwater is not spatially consistent with the elevated soil concentrations of these metals, and therefore is not likely to be related to soil contamination.

**RI Section 8.3.2, 1st paragraph**

"Although antimony, and cadmium were detected above the MCL, these exceedances occurred in isolated locations, and the results of the HHRA indicated that the individual concentrations present in groundwater do not pose unacceptable risks to the construction worker, industrial worker, or potential future resident. The data indicates that the antimony and cadmium in groundwater is not spatially consistent with the elevated soil concentrations of these metals, and therefore is not likely to be related to soil contamination.

## In response to Debbie's comments on the technical memorandum for Site 10, the RI will be revised (Section 7.7) to clarify with these ending sentences of the essential human nutrient discussion:

"Therefore, it was determined that exposure to iron in groundwater does not pose an unacceptable risk to the future resident based on the essential human nutrient analysis."

"Therefore, it was determined that exposure to manganese in groundwater does not pose an unacceptable risk to the future resident based on the essential human nutrient analysis."